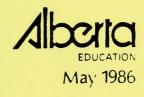
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# GRADE 3 SCIENCE CURRICULUM SPECIFICATIONS

# CURRICULUM BRANCH





## GRADE 3 SCIENCE CURRICULUM SUMMARY

	Per Cent Emphases
PROCESS SKILLS	55
Observing	13
Measuring	10
Classifying	10
Communicating	12
Inferring	5
Predicting	5
PSYCHOMOTOR SKILLS	10
Manipulating	4
Constructing	4
Spatial Relations	2
ATTITUDES	15
Toward Science	10
Others	5

		-	Per Cent Emphases
SUB	JECT MATTER	STILIS SE	20
	MATTER AND ENERGY	getvinion)	9
71	Properties of Objects	patacanth	3
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51	Energy	90134211/10455	3
ž	LIVING THINGS AND ENVIRONEMNT	en malant	9
	Living Things	'gn! (aster#	2
ÓΕ	Plants and Animals	ONOTOR SKILLS	4
	Environment	gnishlogoidh	3
	EARTH, SPACE, AND TIME	Setato uctario	2
	Order and Time	Special Relations	2

### PROCESS SKILLS

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Priority	Na transfer de la constant de la con	Per Cent Emphases
	Observing	
Α	<ul> <li>Identifying, using the five senses, properties, or characteristics of objects</li> </ul>	
Α	<ul> <li>Describing (verbally and in written work) an object on the basis of sensory information</li> </ul>	
С	- Describing qualitative changes within objects	13
С	- Distinguishing between observations and inferences	
С	<ul> <li>Describing objects, change, and interaction of objects in the environment</li> </ul>	
С	<ul> <li>Making predictions and inferences on the basis of observations</li> </ul>	
	Measuring	A
A	- Using simple instruments for measurement	
В	- Selecting appropriate devices for measuring	
В	- Collecting data using appropriate measuring devices	
С	- Estimating the measure of an object	
С	<ul> <li>Organizing measurement data into communicable forms, such as graphs, maps, tables, etc.</li> </ul>	10
С	<ul> <li>Making comparative measurements - lighter than, heavier than</li> </ul>	
С	- Ordering on the basis of comparative measurements	
С	<ul> <li>Using arbitrary measurement units (washers, paper clips, swings of a pendulum)</li> </ul>	
С	- Discovering the need for a standard unit	

CODE: A - High Priority
B - Medium Priority
C - Low Priority

Priority		Per Cent Emphases
	Classifying	
A	- Identifying the condition or basis of a given classification set	
A	- Applying a self-devised classification scheme to a given set of objects, situations, or events	<u>A</u> "
A	- Classifying objects according to attributes or properties (color, shape, size, texture, etc.)	10
В	- Classifying objects first on one property, then on the basis of two properties, and so on	
С	- Classifying objects, situations, or events according to given, or to self-imposed conditions	
	Communicating	
A	- Describing verbally the observable properties of objects	N I
Α	- Describing verbally an object as it undergoes change	8
В	<ul> <li>Describing observations in written form: simple words, phrases to sentences, paragraphs, reports</li> </ul>	12
В	- Constructing simple pictographs and bar graphs	12
С	- Drawing simple diagrams	
С	- Using written units of measurement and their symbols	
С	<ul> <li>Recording responses by using simple symbols:</li> <li>x's, √'s</li> </ul>	9
С	- Filling in charts using simple symbols	

Priority	NATTER AND EMERGY	Per Cent Emphases
	Inferring	
A	- Making observations by using all five senses	
С	<ul> <li>Making as many observations as possible, and choosing only those inferences that account for all observations made</li> </ul>	*
С	<ul> <li>Testing inferences by making more observations, and revising inferences if additional observations do not support the original inference</li> </ul>	
С	<ul> <li>Making and testing inferences when confronted with unfamiliar phenomena</li> </ul>	5
С	<ul> <li>Applying the inferring process to situations which require direct observations</li> </ul>	
С	<ul> <li>Describing objects, situations, and events in written form in reports, etc.</li> </ul>	
С	- Using units of measurement, and their symbols, to communicate quantitative observations	
	Predicting	
A	- Making reasonable predictions that have been based on past experience	
С	- Measuring for accuracy	5
С	- Testing the results of a prediction by:	
	<ul><li>a. teacher-directed tests</li><li>b. student-constructed tests</li></ul>	÷

### SUBJECT MATTER

Priority	MATTER AND ENERGY	Per Cent Emphases
	1. Properties of Objects	
	Students will:	× .
A	- OBSERVE the properties of objects using their five senses	3
A	- COMPARE, ORDER, and CLASSIFY objects according to one or more properties	0 30
A	- DESCRIBE and RECORD their observations of properties of objects	79
=	2. Properties of Matter	
Α	Students will: - CLASSIFY given materials as solids, liquids, or gases	
A	- OBSERVE properties and behavior of solids and CLASSIFY them according to:	
	<ul> <li>a. metallic - non-metallic</li> <li>b. float - sink</li> <li>c. soluble - insoluble</li> <li>d. magnetic - non-magnetic</li> </ul>	6
A	- OBSERVE samples of liquids and CLASSIFY them according to the degree of properties such as:	3
6	<ul><li>a. color</li><li>b. transparency to light</li><li>c. viscosity</li></ul>	5
Α	<ul> <li>OBSERVE and DESCRIBE matter undergoing changes such as freezing, melting, evaporating, heating, cooling</li> </ul>	
С	- OBSERVE that gases occupy space and exert pressure	
A	- MEASURE and compare masses and volumes of samples of matter	
В	<ul> <li>DEMONSTRATE various methods of organizing and displaying information gathered</li> </ul>	

Priority		Per Cent Emphases
	3. Energy	
	Students will:	
A	<ul> <li>NAME, DESCRIBE, and CLASSIFY some sources and forms of energy (heat, light, sound, electricity)</li> </ul>	A a
A	<ul> <li>MEASURE changes in heat energy using a thermometer</li> </ul>	
В	- DESCRIBE, COMPARE, and DEMONSTRATE behaviors that conserve energy in their environment	3
С	- IDENTIFY the sun as the primary source of the earth's energy	A
A	- DESCRIBE and DEMONSTRATE ways we use energy in our daily lives	A-

Priority	LIVING THINGS AND ENVIRONMENT	Per Cent Emphases
	1. Living Things Students will:	
A	- CLASSIFY objects as living and non-living	2
A	- OBSERVE, DESCRIBE, and CLASSIFY living things according to their unique characteristics and behaviors	A .
	2. Plants and Animals	*
A	Students will: - CLASSIFY living things as plants or animals	5
Α	<ul> <li>DESCRIBE and CLASSIFY plants and animals in various ways, e.g., locomotion, habitat, groups with common characteristics</li> </ul>	4
Α	- OBSERVE, MEASURE, DESCRIBE, and RECORD stages in the growth of plants	
В	<ul> <li>OBSERVE and MEASURE characteristics of seeds,</li> <li>e.g., size, shape, dispersal</li> </ul>	
С	- DESCRIBE proper care of plants and animals, such as pets	
	3. Environment	
	Students will:	
Α	- OBSERVE, IDENTIFY, and DESCRIBE those changes in the environment that have resulted from man's activities	3
A	<ul> <li>INFER the consequences or outcomes of changes, both man-made and natural, which occur in the environment</li> </ul>	
В	- IDENTIFY various parts of an environment and begin to infer their interdependence	

Priority	EARTH, SPACE AND TIME	Per Cent Emphases
	1. Order and Time Students will:	
A	- OBSERVE, DESCRIBE, MEASURE, and RECORD changes that occur in their environment	
A	- OBSERVE, DESCRIBE, and MEASURE changes that occur over varying periods of time	2
A	- OBSERVE, DESCRIBE, and ORDER changes that occur in a regular pattern	
С	- INFER that observed changes may be classified as reversible	

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